

FIGURE 1A**CHIR 12.12 light chain:****leader:****MALPAQLLGLMLWVSGSSG****variable:****DIVMTQSPLSLTVPGEPAISICRSSQSLLYSNGYNYLDWYLQKPGQSPQVLISLGS
NRASGVDPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQARQTFPTFGPGTKVDIR****constant:****RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVT
EQDSKIDSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC****FIGURE 1B****CHIR-12.12 heavy chain:****leader:****MEFGLSWVFLVAILRGVQC****variable:****QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVAVISYEESN
RYHADSVKGRFTISRDN SKITLYLQMNSLRTEDTAVVYCARDGGIAAPGPDYWQQGT
LTVSS****constant:****ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL
QSSGLYSLSSVTVPSSELGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPA
PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK
TKPREHQYNSTYRVVSVLTVHLQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSRREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPFVLDSDG
SFFLYSKLTVDKSRWQQGNVFSCSVHREALHNHYTQKSLSLSPGK****alternative constant region:****ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL
QSSGLYSLSSVTVPSSELGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPA
PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK
TKPREHQYNSTYRVVSVLTVHLQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSRREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPFVLDSDG
SFFLYSKLTVDKSRWQQGNVFSCSVHREALHNHYTQKSLSLSPGK**

FIGURE 2A

DNA sequence of light chain of CHIR-12.12:

5'atggcgctccctgctcagctccggggcgcgaagcctcgggtctctgcatccagtgaggatattggaigacacagtc
cactctccctgaccgtcaccctggagagccggootccatctcctgacgggtccagtoagagccctcctgtaagtaagggata
cnaactatgggallgglaacatgcagangccaggggcagctccacaggtcctgacacclllyggllcnaatcgggctccgggg
tccclgacaggttcagtgccagtgatcaggccacagatuuacuaolgaanaalcagcagagtgaggagctgaggatgttggg
llallacigcagcagctccgacaaaotccaltcactlccggccclgggaocnaagtgatatacagacgaactgaggolyou
ccalcigolictatctcccgccatctgatgagcagllgaaactcgggaactgcccctgtgtgtgtgctgtgaalaaccllclacc
cagagagggccaaagtacagtggaagggggaaacggccctccaatcgggttaactcccaggagagllgicacagagcagga
cagcnaaggacagocclaoagccloagcagcaocclgaogotgagcnaagcagacotaogagaaacacaauglclacgo
olgggaagloacccatcagggtgagclogcccgicacaaagagcttcaacaggggagaggtgttag3'

FIGURE 2B

DNA sequence of heavy chain of CHIR-12.12 (including introns):

5'atggagllgggcagcgtgggtttcctgttgclatllaaaggglgloaagtgcaggtgaagttggaggatclggggg
uggcgiggtoongoctgggaggtccclgagacloclcgtgacagoccltggtaccacotloaglaagclaggcagcactgg
gtccggcaggctccaggcgaaggggcggagllgggtggcagttatcatatgaggaaaglaulagataccatgcacactc
cgtgaaggccgaticaccatctccagagacaaftoonagatcnaogotgtatcigoaaalguacagccloagaaactgaggga
cucggotgtgtattactgtgogagagagllggggglalagcagocotgggctgaotaclyggggocagggaacccclggica
ccylclccicagcaagtaaccaaggggccatccgtctcccccclggcgcccgctagcaagagcacctctggggggocacagc
gyccclgggctgcttctcaaggactacitcccgaucgggclgacgggtgtgtgtgaactcagggcgcclgaccagcggg
gtgacacacctccoggggtgtctacagloolcaggacclclnotccotcagcagogtgggtgacclgycclccagcagclgg
gcacccagacctacatctgcaacgllgaaacacaagcccgcaacaccaaagggtggacaagagagllggllgagagccag
cacaggagggggagggtgtctgclggaaagcagggctoagcogotootgcotggagcagatcccgclalgonlccagto
agggcagcnaaggcagggcccgclgycclcttonocccggaggootctgcccgcocccalcicagclagggagagggtct
clggcllllcccccaggclctgggacaggcacagggttaggllggccclaaacccaggccctgcacacaaaggggcagylgclg
ggolcngacotgocaaaggccatctccggagggacccotgocccotgaocaaagccocccocaaugggocaaactotocact
ocotcagctogggaaocclclclcccccagatccagtaactcccaatcttclclgacagagcccaatcttggacaaaac
tcacacatggccaccgllggccagglaagccagcccgaggtctgcccctcagclcaaggccgggacaggtgcccctagagta
gootgoatcnggggacaggcccccggcggtgclgacagotcagccotccalccllclclagcagocctgaactootggggg
gacogloagclctcctotccocccocnaaaacccaaggacacctctcagatcccggaacccclgagylcactgctgtgtgt
ggacgllgagccacgaagacccctgagggtcaaggtcaacclggllacgllggacggcgtggaggtgcataatgccaaagacaag
ccgcggggaggagcagtlacaacagccagctaccgtgtgtgtcagcgtccclaccgtcctgocccagggcaggtggaaggga
aggaglaouagllgcaagggtclocnaoanagccotccocagccccalcagagaaacacatcccaaggccaaaggglyggac
ccgllggggllgcaaggccacatggacagaggccggcclggcccccacctctgcccctgagagllgacccclglaacnaact
ctgtccctacagggcagccocccaggaacocaaaggtgtacocccctgcccoccalcccgggaggagatgaocnaagaaaccagg
lcagcctgacctgctgtgtaaaagggcllclalcccagcgacatcggcgtggagtgggggaggaantgggcagccggagaa
cnaactacaaguccacggclccctgctggactccgacgggclcccllclclctatagcnaagclacccgtggacnaagagoga
gllggaaagagggggaagctctctcagclccgllgagcaggggtctgcacaaacactacacgcagaaagagccctctccct
gclccgggttaaatga3'

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FIGURE 3A**CHIR-5.9 light chain:****leader:****MALLAQLLGLLMLWVPGSSG****variable:****AIVMTQPPPLSSPVTLGQPPASISCRSSQSLVHSDGNTYLNWLQQRFGQPPRLLIYKFF
RRLSGVPDRFSGSGAGTDFTLKISRVEAEDVGVYYCMQVTFPHTFGQGTRLEIK****constant:****RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVT
EQDSKDSSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC****FIGURE 3B****CHIR-5.9 heavy chain:****leader:****MGSTAILALLLAVLQGVCA****variable:****EVQLVQSGAEVVKRPGESLKISCKGSGYSFTSYWIGWVRQMPGKGLEWNGGIIYPGDS
TRYSPSPFQGGVTISADKSISTAYLQWSBLKASDTAMYYCARGTAAGRDIYVYVGM
WGGGTTVTVEE****constant:****ASTKGPSVFPLAPASKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL
QSSGLYSLSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPA
PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK
TKPREBQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSRREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPFVLDSDG
SFFLYSKLTVDKSRWQQGNVFSQSVMHREALHNHYTQKSLSLSPGK****alternative constant region:****ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL
QSSGLYSLSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPA
PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAK
TKPREBQYNSTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSRREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPFVLDSDG
SFFLYSKLTVDKSRWQQGNVFSQSVMHREALHNHYTQKSLSLSPGK**

FIGURE 4A

Coding sequence for short isoform of human CD40:

```

1  atggttggto tgcctotgaa gtgogtooto tggggotgct tgotgacogo tgtocatoa
61  gaaccaccca ctgcatgcag agaaaaacag taccataaa acagtcagtg ctgttoltg
121  tccagccag gacagaaact ggtgagtgac tgcacagagt tcacigaaac ggaalgccil
181  cotlgoggig aaagoguaall ootagacaco tggaaogag agaoaoatg ocaocagcao
241  aaatactgag accccaacct agggcttggg gtccagcaga agggcacotc agaaacagac
301  accatctgca cctgtgaaga aggttggcac tglacagtg aggtotglga gogotgtto
361  otgaocgcl calgotcgc oggollggg gtcaagoga ttgtacagg ggtttctat
421  accatctgag agccctgccc agtcggcttc tctccaalg tgcactgc ttcgaaaaa
481  tgtaccctt ggaacaaggc cccaggaicg gctgagagoc ctgggtgta toocatcat
541  otctgggato ctgttgcaa tctcttggg gctggtott atcaaaaagg tggcaagaa
601  gccaaccaat aa

```

FIGURE 4B

Encoded short isoform of human CD40:

```

1  mvrplqcvl wgcilavhp eppiacrokq ylnsqool oqpgqklvd cteftetoI
61  pcgeselldt wnrothchqh kyedpnlgir vqkgtseld tctceegwh ciseaoescv
121  lhracspgfg vkqiatgvsd tccpcpvgf fsnvsaafek chpwirspga aespqgdphh
181  lrdpvchplg aglyqkggqe anq

```

FIGURE 4C

Coding sequence for long isoform of human CD40:

```

1  atgggttcgc tgcctcgcga gtgcgtccic tggggcctgct tgctgaccgc tgtccatcca
61  gaaccaccca ctgontgcag agaaaaaacag tacctaataa aaagtcagtg ctgttclltg
121  tgcacagoong gacagaaact ggtgagtgao tgcacagagt taactgaaa ggaatgccll
181  ccttgcggtg aaagcgaalt cclagacacc tggaacagay agacacacly ccaccagcac
241  aaaluolcgy aocccanccel agggottogg gtooaagaga agggacoto agaaacagao
301  accatctgca cctgtgaaga aggetggcac tgtacgagtg aggcclgtga gagclgtgic
361  ctgcaccgct calgctcgc cggclllygg gtoaagcaga ttgctacagg ggtttctgat
421  aocatotgog agcoctgcoo agtoggolto ltelcualg tglcalcigo ltlcnaanaa
481  tgcacccert ggacaagctg tgagaccaaa gacciggttg tgcacagyc aggcacaana
541  aagacigatg tigtclgtgg tcccaggat cggctgagag ccctggtggt gatccccalc
601  alottoggga lcolgllyc catoccltg gtgctggtot ttatnaaaa ggtggccaag
661  aagccaacca alaaggcccc ccacccaag caggaaaccc aggagatcaa tticccgac
721  gatcttctg gctccaacac tgctgctcca gtgcaggaga clttacatgg atgccuaccg
781  gtoaccagg aggatggcaa agagaglcgo alclaglgc aggugagaa giga

```

FIGURE 4D

Encoded long isoform of human CD40:

```

1  mvrllpqvl wcoltavhp epptacrekq ylinsqccsl capgqklvsd clctetcl
61  pcgesefldt wnrethchqh kydpnlglr vqkgtiseld tlctceegwh ctscacesv
121  lhrscspgfg vkqiatgvsd ticepcpvf fsvssafek chpwtsctk dlrvqqagtn
181  ktdvvogpqd rlrallvpi ifgilfuill vlvtkkvak kptnkaphpk qepqeinfpd
241  dlpgantaap vqetlhgcqp vlqedgkesr isvqerq

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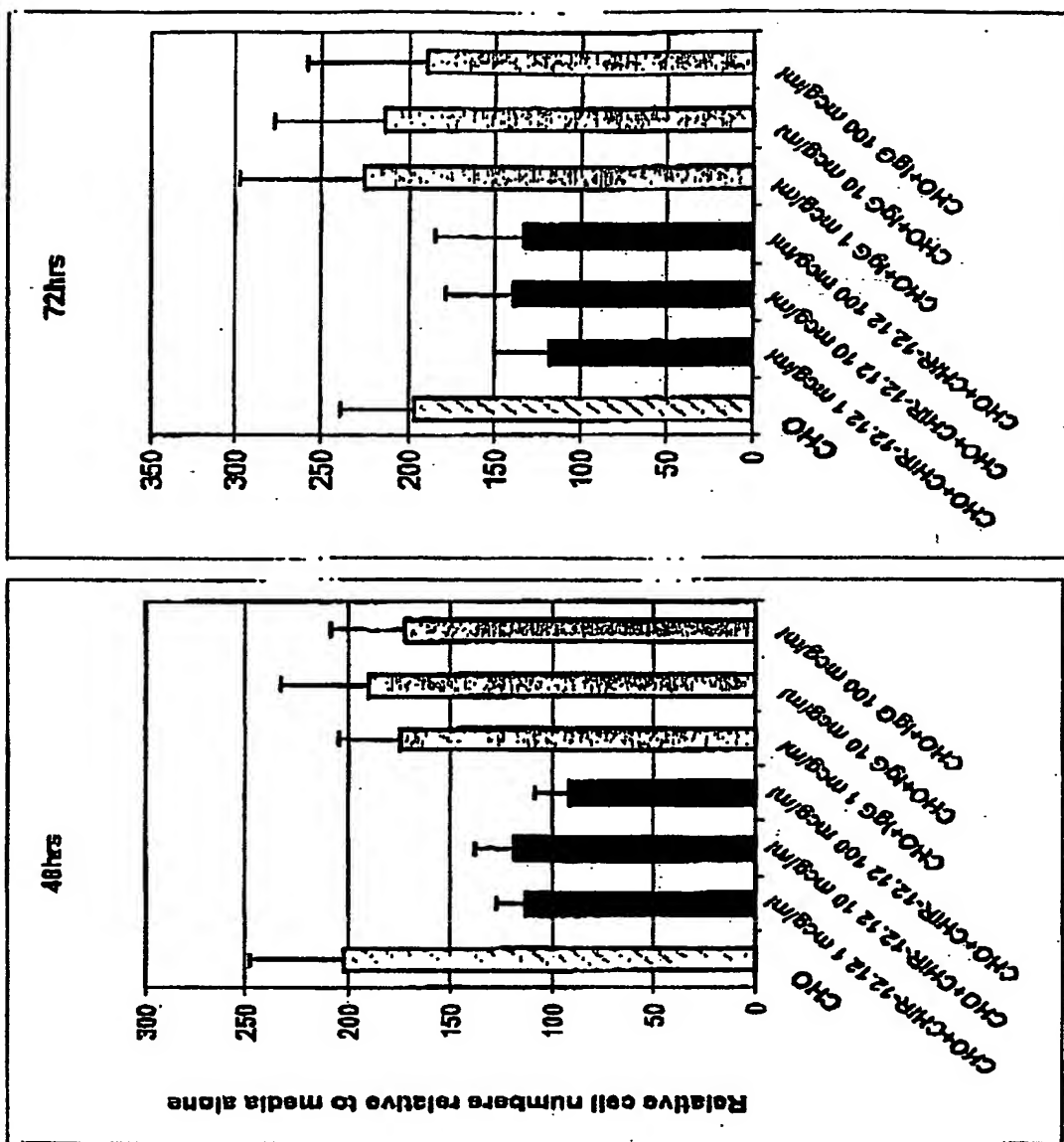


FIGURE 5B

FIGURE 5A

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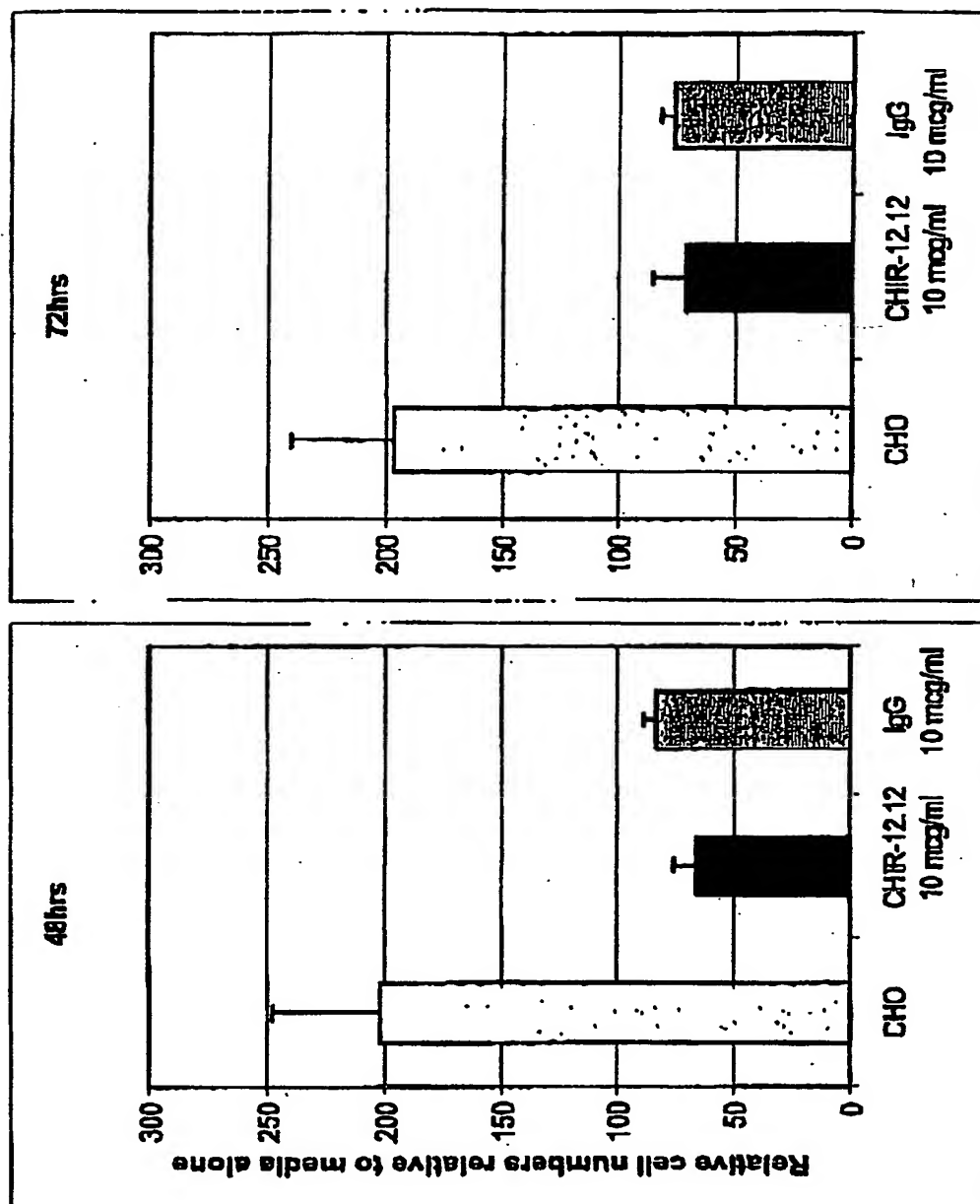


FIGURE 6B

FIGURE 6A

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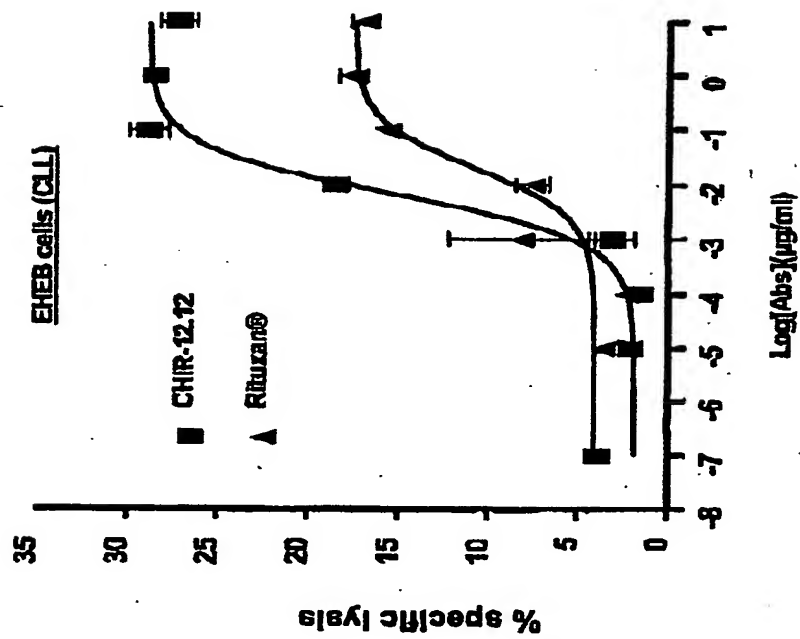
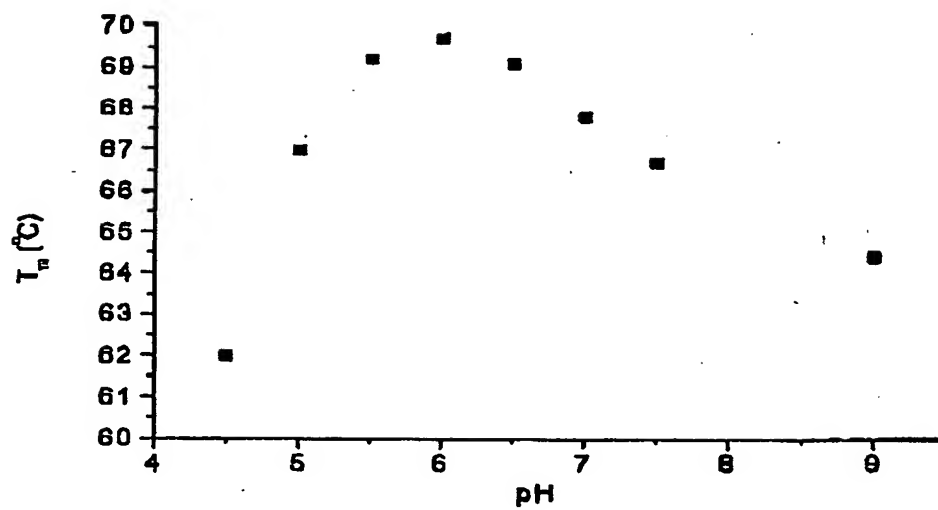


FIGURE 7

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FIGURE 8

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